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WHAT IS CLAIMED IS:

- 1. A multi-functional tool assembly for a processing tool of a waste processing machine comprising:
- a tool holder for attachment to a rotor assembly of the waste processing machine; and

a multi-functional tool attached to said tool holder to reduce waste material and to aggressively output the reduced waste material from the rotor assembly of the waste processing machine.

2. A multi-functional tool assembly as set forth in claim 1 wherein said multi-functional tool comprises a waste reducer and a fan disposed adjacent said waste reducer.

3. A multi-functional tool assembly as set forth in claim 2 wherein said fan has an axial width greater than said waste reducer.

- 4. A multi-functional tool assembly as set forth in claim 2 wherein said fan is located radially inward of said waste reducer.
- 5. A multi-functional tool assembly as set forth
 in claim 2 wherein said waste reducer is a cutter made of a
 carbide material for cutting waste material.

- 6. A multi-functional tool assembly as set forth in claim 2 wherein said fan is made of a metal material.
- 7. A multi-functional tool assembly as set in claim 2 wherein said fan has a generally rectangular shape.
- 8. A multi-functional tool assembly as set forth in claim 2 wherein said waste reducer is generally rectangular in shape.
 - 9. A multi-functional tool assembly as set forth in claim 2 wherein said multi-functional tool comprises a head and a shaft attached to the head.
 - 10. A multi-functional tool assembly as set forth in claim 9 wherein said waste reducer and said fan are attached to said head opposite said shaft.
- 20 11. A multi-functional tool assembly as set forth in claim 1 wherein said tool holder includes a pair of arms extending radially and said multi-functional tool is attached to one of said arms.

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a tool holder for attachment to a rotor assembly of the waste processing machine; and

a single multi-functional tool attached to said tool holder to reduce waste material and to aggressively output the reduced waste material from the rotor assembly of the waste processing machine.

- 13. A processing tool as set forth in claim 12 wherein said tool holder comprises a first arm extending radially and a second arm extending radially and spaced from said first arm.
- 14. A processing tool as set forth in claim 13 wherein said multi-functional tool is attached to said first arm.
 - 15. A processing tool as set forth in claim 14 including a raker attached to said second arm.
- 20 16. A processing tool as set forth in claim 12 wherein said multi-functional tool comprises a waste reducer and a fan disposed adjacent said waste reducer.
- 17. A processing tool as set in claim 16 wherein said fan has a width greater than said waste reducer.

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- 18. A processing tool as set forth in claim 16 wherein said fan is located radially inward of said waste reducer.
- 19. A processing tool as set forth in claim 16 wherein said waste reducer is a cutter made of a carbide material for cutting waste material.
- 20. A processing tool for a waste processing 10 machine comprising:
 - a tool holder for attachment to a rotor assembly of the waste processing machine, wherein said tool holder includes a first arm extending radially and a second arm extending radially and spaced from said first arm; and
 - a single multi-functional tool attached to either one of said first arm and said second arm of said tool holder having a cutter to reduce waste material and a fan disposed adjacent said cutter to aggressively output the reduced waste material from the rotor assembly of the waste processing machine.